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REMARKS

The Office action of January 24, 2002, has been carefully considered.

The title has been changed to reflect the US spelling of "aluminum" and an abstract has been added.

Claims 3 through 5 have been rejected under 35 USC 112, first paragraph, as containing subject matter not adequately described in the specification. The Office action states that Sk determined by the 3D roughness measurement along with an Ek value and the L* according to ASTM D2244-89, section 6.2, are unclear since the measurements are not well described in the specification.

As regards 3D roughness, the method for determining 3D roughness is described in detail in the specification at page 12, line 8, through page 13, line 5. These measurements are performed using a stylus sensor (page 12, lines 11-12) which is familiar to one of ordinary skill in the art. The method used to calculate the three-dimensional roughness parameter from the data obtained is not new, and the various parameters R_a, Z_o, R_q, S_k and E_k are frequently used for surface characterization. The mathematical method for calculating the various parameters is described at page 12, line 20, through page 13, line 5.

As regards the ASTM standard, a copy of the standard is

enclosed. The test method covers the calculation, from instrumentally measured color coordinates based on daylight illumination, of small color differences between nonfluorescent, nonmetameric, opaque specimens. This is a grey level analysis based upon a colorimetric measurement performed with a colorimeter of known type, comparing with a standard IEC irradiation, as described at page 9, lines 9 through 15 of the specification. The calculation of the so-called L*a*b parameter was done according to this ASTM standard. Since the paragraph at page 9, lines 9 through 28 of the specification refers one to the standard, and thereby essentially incorporates the ASTM standard by reference, Applicants believe that one of ordinary skill in the art could easily apply this standard to a measurement, and in fact, discussion of the ASTM standard is the most appropriate way to describe this measurement.

Claim 5 (now Claim 25) is directed to obtaining a 2D roughness measurement analysis with an optical scanner, a method described in the specification at page 9, line 29 through page 12, line 7. This is a simplified method of mapping grey levels which is fully described with data analyzed according to a numerical method fully described on pages 11 and 12 of the specification. These numerical methods are familiar to persons of ordinary skill in the art, with the

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parameters R_a, Z_o, R_q, S_k and E_k being defined in the same manner as for 3D roughness measurements, except that they are obtained for two-dimensional data only, and on the basis of data obtained from physical measurements of a different type.

In light of the submission of ASTM Standard D 2244-89, and the comprehensive discussion of the test methods found in the present specification, Applicants submit that Claims 3 through 5 are fully supported by the specification in a manner which would enable anyone of ordinary skill in the art to carry out the test methods described in the specification. Withdrawal of this rejection is accordingly, requested.

Claims 2 through 6 have been rejected under 35 USC 112, second paragraph, as being indefinite in the use of broad and narrow ranges in the same claims. Claims 1 through 9 have now been cancelled, and replaced by new Claims 21 through 36, in which the preferential ranges have been removed to dependent claims. Withdrawal of this rejection is accordingly requested.

Claims 1 through 9 have been rejected under 35 USC 103 over Sawada et al in view of Higuchi et al. The Office action takes the position that Sawada et al discloses an aluminum strip with a rough surface produced by rolling, but does not disclose undergoing a sulfur anodic treatment and a change in roughness of less than 20. Higuchi et al has been cited to

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disclose an acid pickling treatment on an aluminum strip in which the surface roughness difference is less than 20, for the purpose of building a corrosion resistant part, and that it therefore would have been obvious to provide an acid pickling treatment and a roughness of less than 20 in the strip of Sawada et al.

Sawada et al is directed to a method for producing a planographic printing plate support and specifically an aluminum support having an excellent electrolytic roughness. It is well known that planographic printing plates must exhibit a well controlled surface roughness known as a satin-type finish. If the roughness is too low, and the plate has a mirror-type finish, printing ink will not adhere to the surface of the plate. The object of Sawada et al is to produce a planographic printing plate excellent both in the aptitude to roughening and in external appearance, as disclosed at column 2, lines 56-58. At column 1, lines 14-17, Sawada et al state that it is generally necessary that the aluminum plate have a moderate adhesive property to a photosensitive material and a moderate water retentivity.

Accordingly, the goal of Sawada et al is completely different from the goal of the claimed invention, which is to obtain a surface having a mirror-type finish. The finish of the claimed invention would by totally unsuitable for the

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purposes of Sawada et al.

Higuchi et al is directed to a process for hot-dip coating steel material with molten aluminum alloy in a one-stage coating method using a flux and a bath of molten aluminum alloy metal. The Office action states that "Higuchi et al disclose acid pickling treatment on an aluminum strip wherein the surface roughness difference is less than 20 (col. 10, lines 64-67 through col. 11, lines 1-9) for the purpose of building a corrosion resistance part."

Initially, it is noted that the passage quoted in columns 10 and 11 is directed to the surface roughness of a steel material, not aluminum, and the passage does not refer to any acid-pickling treatment. Acid-pickling treatment is mentioned as a method of removing the oxide layer of the steel surface prior to dipping the workpiece into liquid aluminum, as disclosed at column 10, lines 43 through 45. Surface roughness is then adjusted by means of mechanical treatment of the steel surface prior to dip coating with aluminum, as disclosed at column 10, lines 45 to 50.

Moreover, Higuchi et al seeks to avoid both below average roughness and above average roughness of the steel surface, for the purpose of proper coating. This is discussed in detail in the paragraph bridging columns 10 and 11.

Accordingly, there is no teaching in Higuchi et al which

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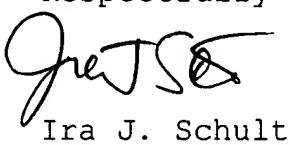
is relevant to obtaining an aluminum alloy strip of the very low surface roughness which is presently claimed.

Thus, Sawada et al has the object of obtaining an aluminum printing plate of different surface characteristics from the claimed invention, and Higuchi et al is not concerned with obtaining an aluminum plate at all, but rather with coating a steel plate with aluminum, with the discussion referred to in the Office action directed to the roughness of the steel surface not the aluminum surface. Accordingly, the combination of references does not disclose or suggest the claimed invention, and withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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APPENDIX

IN THE SPECIFICATION:

Page 1, line 10: [STATE OF THE] DESCRIPTION OF RELATED ART.

Page 5, line 14: [OBJECT] SUMMARY OF THE INVENTION.

Page 7, line 24: BRIEF DESCRIPTION OF THE [FIGURES] DRAWINGS.

Page 8, line 5: DETAILED DESCRIPTION OF THE INVENTION.

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